WL-TR-97-6007

INDEX TO U.S. ARMY AIR CORPS INFORMATION CIRCULARS

PART I: HEAVIER-THAN-AIR CIRCULARS NO.1-715 PART II: LIGHTER-THAN AIR CIRCULARS NO. 1-157



ENGINEERING DIVISION AIR SERVICE MCCOOK FIELD, OH

OCTOBER 1997

FINAL REPORT FOR 01/01/19-12/01/39

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19971022 078

DITIC QUALITY INSPECTED 5

PLANS AND PROGRAMS DIRECTORATE WRIGHT LABORATORY AIR FORCE MATERIEL COMMAND WRIGHT PATTERSON AFB OH 45433-7523

REPORT DOCUMENTATION PAGE

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Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden. to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE	3. REPORT TYPE AND	D DATES COVERED
	OCT 1997	FINAL	01/01/1912/01/39
4. TITLE AND SUBTITLE INDEX TO	U.S. ARMY AIR	CORPS	5. FUNDING NUMBERS
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14. SUBJECT TERMS			15. NUMBER OF PAGES
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AIR CORPS INFORMATION CIRCULAR

PUBLISHED BY THE CHIEF OF THE AIR CORPS, WASHINGTON, D. C.

Vol. VII

June 30, 1932

No. 677

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UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1932

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- #*35. Comparative Test of Special Homogeneous Gasoline and Commercial Aeronautic Gasoline. (D11.31/44.)
- #*36. Report of Static Test of DH-4 (P-34) Wing Cellule. (D52.1/DH-4/91.)
- *37. Performance Test of U. S. X. B. I.-A. with 300 Horsepower Hispano-Suiza Engine. (D52.1/U. S. X. B. I.-A/1.)

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#*38. Report of Static Test of the Landing Chassis of DH-4 (P-34). (D52.1/DH-4/86.)

*39. Structural Weight Analysis of Airplanes. (D52.1/285.)

- *40. Performance Test of Thomas-Morse MB-3 with 300 Horsepower Hispano-Suiza Engine. (D52.1/ Thomas-Morse/22.)
- #*41. Standard Engine Report on the Six-Cylinder Benz Aeronautic Engine Rated at 200 Horsepower at 1,400 Revolutions Per Minute. (D52.41/Benz/7.)
 - 42. Power Required to Drive Aeronautic Engine Magnetos and Generators. (D52.4/3.)

43. Report on Wind Tunnel Test of Messenger Airplane. (D52.15/131.)

- #44. General Descriptive Matter on Dopes and Instructions for the Application of Dope and Pigmented Protective Coverings. (D11.23/20.)
- *45. General Descriptive Matter on Airplane Fabrics, Tapes and Cords, and Instructions for the Application of Fabric to the Wings. (D24.31/16.)
- #46. Aeronautic Gasoline, Specifications and Methods for Testing. (D11.31/19.)

*47. Universal Test Engine. (D52.41/92.)

- *48. Storage and Preservation of Rubber Goods, Tires and Tubes, Liberty Ignition System Instruction Board. (D00.22/6.)
- #*49. Report of Wind Tunnel Test on United States Army Aerofoils 25, 26, 27, 28, 29. (D52.33/145.)
- #*50. Performance Test of Loening Monoplane with 300 Horsepower Hispano-Suiza Engine. (D52.1/Loening/5.)
- #*51. Performance Test of Ordnance Type "D" with 300 Horsepower Hispano-Suiza Engine. (D52.1/Orenco/3.)
- *52. Discussion of Stress Analysis of an Airplane Wing Cellule of the Multi-spar Type of Wing Construction, with Special Reference to the Loading Condition of the Standard Static Test. (D52.33/146.)

*53. Properties of Woods at 10 per cent Moisture. (D11.1/139.)

54. Aerial Bombardment Manual, Part 1, Introduction and Preface. (C52.234/37-Part 1.)

*55. Aerial Bombardment Manual, Part 2, Rules and Regulations. (C53.234/37-Part 2.)

- *56. Aerial Bombardment Manual, Part 3, Organization of Training Department and Ground Training for Pilots and Bombers. (53.234/37-Part 3.)
- 57. Aerial Bombardment Manual, Part 4, Flying Training for Pilots and Bombers. (C53.234/37-Part 4.)
- 58. Aerial Bombardment Manual, Part 5, Operations (Service Squadrons) and Appendix. (C53.234/37-
- #*59. Test Report of Marlin (7 M. G.), Model 1916, After Changes Were Made in Top Lock Container to Accommodate Single Shot Mechanism to be Used with Nelson Gun Control. (D72.1/Marlin/14.)
- *60. Airplane Tachometers. (D13.3/Tachometers/6.) *61. Testing of Airplane Tachometers. (D13.3/Tachometers/5.)

#*62. Report on Air Fan Type FA-9. (D13.41/63.)

*63. Report of Radio Generator Airfan Head Resistance Measurement. (D13.41/64.)

- #*64. Standard Report on the 300 Horsepower Hispano-Suiza Aviation Engine with Steel Cylinders. (D52.41/ Hispano-Suiza/67.)
- *65. Performance Test of U. S. X. B. I.-A. with 300 Horsepower Hispano-Suiza Engine Showing Improvement in Performance with Propeller X-19677. (D52.1/U. S. X. B. I.-A./1 Supp.)
- #66. Report on Foster Modification in Liberty Delco Switch Assembly. (D52.41/Liberty/192.)

*67. Report of Airplane Speaking Tube. (D13.411/40.)

68. An Empirical-Theoretical Method of Comparative Prediction of Airplane Performance. (D52.15/91.)

69. Air Service Reserve Officers, April 15, 1920. (B10/30.)

*70. Test of Crash-proof Tanks. (D52.44/54.)

- #*71. Performance Test of Fokker D-VII with Liberty Six Engine. (D52.1/Fokker/33.)
 - 72. Notes on the Characteristics, Limitations, and Employment of the Air Service. (C70/30.)

*73. Air Tactics, by H. E. Hartney, Lieutenant Colonel, Air Service. (C70/20.)

- 74. Corps Air Service, Field Manual (Provisional) Organization-Operations. (A00.1/11-Part I.)
- 75. Tactical History of Corps Observation, Air Service, American Expeditionary Force. (A00.1/11-Part II.)
- 76. Notes on Recent Operations, General Principles, Corps and Army Observations, Pursuit, Day Bombardment, Balloons. (C70/38.)
- *77. Meteorology and Aeronautics, Location and Layout of Flying Fields, Exploration of Upper Air, Forecasts, Light Charts, Magnetic Declination Charts. (A40/18.)
- *78. Notes for Communications Officers (Provisional). Wire Telephone, Radio Telephone, Wire Telegraph, Radio Telegraph, Radio Personnel and Terrestrial Station Equipment, Visual Signalling, Dropped Messages, Airplane Couriers, Mounted Couriers, Aerial Photography in Liaison, Carrier Pigeons, Unit Requirements for United States and Service Operations. (C11.2/19.)

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79. Notes for Communications Officers (Code Instruction). (C10/15.)

*80. Notes for Communications Officers (Vacuum Tubes), Provisional Electron Theory, Two-element Electron Tubes, Three-element Electron Tubes, the Oscillating Tube, Continuous Wave Reception, Amplification, Radio Telephony. (D13.411/37.)

*81. Flying Training Regulations, Provisional, Curriculum of Flying Instruction for Flying Schools, Field and Air Rules, Organization of Flying Department, Method of Installing and Organizing a Flight, Records

and Reports. (C53.22/69.)

- *82. Aerial Navigation Instructions, Provisional, Maps and Map Reading, Magnetism and the Compass, Setting the Course, Checking the Course, Navigation by Astronomical Observations, Cloud Flying. (D13.3/28.)
- 83. Pursuit and Combat Flying Training Regulations. Provisional Introduction, Course of Training Fighting Tactics. (C53.221/2.)
- *84. Air Service Manual, Organization, General Principles, Security, Shelters, Marches and Convoys, Orders and Reports, Drills, Ceremonies, Parades, Inspections, Supply, Aerial Photography, Meteorology and Aeronautics, Cooperation with Antiaircraft Artillery, Formation Flying, Rules of the Airdrome and of the Air, Dropping of Supplies to Infantry Troops by Airplane, Aerial Navigation, Pursuit Aviation, Bombardment Aviation, Observation Aviation, Balloons. (C53/103.)

*85. Aerial Observation for All Arms. Aerial Reconnaissance Cooperation of Air Service and Infantry, Cooperation of Air Service and Cavalry, Cooperation of Air Service and Tanks, Balloon Observation,

Aerial Photography. (C53/98.)

86. Regulations for Corps Air Service Operations Officers, Including Description of Divisional Corps Observation, Operations Room, Duties of Operations Officer for Squadron, Group, Corps. Relations with Engineer Officer and Adjutant. (C70/43.)

87. Notes for Pursuit Pilots. Manual for Flight Commander, Night Pursuit Pilot, Pursuit Pilot, Two-seater

Pursuit Pilot, Two-seater Pursuit Gunner. (C53/101.)

- *88. Aerial Tactics. Observation (Army and Corps) Bombardment (Day and Night), Pursuit-Combat (Pursuit-Attack). Includes Information, Liaison, Security, Orders and Reports, Marches and Convoys, Group Organization, Squadron Organization, Preliminary Training at the Front, Missions, Raids, Combat. (C70/3.)
- 89. Air Service Liaison Regulations, Part I, Liaison with the Line between Flying Units, between Army Air Service and A. A. Artillery, Searchlight Engineers, Observation Balloons, Plans of Employment, Field Orders, Battle Orders, Telephone Liaison, Radio Liaison, Reports. (C11.1/21.)

*90. Air Service Liaison Regulations, Part II, Liaison with Infantry. (C11.1/21.)

91. Not printed.

92. The Variation of Horsepower with Altitude. (D52.45/50.)

- 93. Index to Technical Reports of Engineering Division, Supply Group, Air Service, Nos. 1-1300, January, 1918-June, 1920. (C13/32.)
- #*94. Report on Auxiliary Control for Use in Connection with the Airplane Radio Telephone Set, Type SCR-68. (D13.411/46.)

*95. Report of Control Cable Guide Running Test. (D52.39/76.)

96. Manual of Aerial Photography, Provisional; Value and Scope, Personnel, Routine of Work, Materials, Methods. (A30.2/12.)

97. Official Airplane Report Form. (D60.1/46.)

98. Report on Comparative Merits of Various Insignia. (A81/34.)

99. Air Medical Service, Operation of the Medical Division of the Air Service Since the Signing of the Armistice, A New Type of Rebreather and Other Respiratory Apparatus, The Psychological Effect of Oxygen Deprivation, Cardio-Vascular Rating as a Measure of Physical Fatigue and Efficiency; Dark Adaptation, with Special Reference to the Problems of Night Flying, Contribution to the Study of Dark Adaptation, Maddox Rod and Screen Test Combined, Respiratory Volumes of Men During Short Exposures to Constant Low Oxygen Tensions Attained by Rebreathing, Alveolar Air, Respiratory Volume at Low Oxygen Tensions, Compensatory Reactions to Low Oxygen, The Reactions of the Cardiac and Respiratory Centers to Changes in Oxygen Tension, Relation of the Sighting Eye to the Measurement of Heterophoria, Consideration of Some Tests for Determining the Sighting Eye, Maddox Multiple Rod: A Consideration of Its Optical Defects, A New Apparatus for Testing Accommodation, Stereomicrometer, Judgment of Distance with Sempahores and a Screen at One Hundred Meters, Note on the Low-Pressure Chambers Installed in the Medical Research Laboratory of the Air Service. (B63/7.)

100. Index to Information Circulars 1-100. (Superseded by No. 677.)

#101. Report of Physical Tests on K Bar Struts from JV-Martin Airplane. (D52.1/J. V. Martin/2.)

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- 102. A Method for Determining the Angular Setting of a Tail Plane to Give Balance at any Given Condition.
- 103. Report on Life of Wing Coverings Using Clear Dope. (D24.3/35.)
- #104. Report of Test on Steel Tubing and Wing Beams Taken from the Fokker D-VII. (D52.1/Fokker 36.) 105. Covering Wing Gasoline Tanks in Martin Bomber. (D52.1/Martin/14.)

- 106. Standard Altitude Chamber Test for Engines Submitted to the Bureau of Standards by the Engineering
- 107. Report on Wind Tunnel Test of Verville Racer. (D52.1/Verville/10.)

#108. The Spalding Voice Tube. (D13.411/42.)

#109. Report on Performance Test of Thomas Morse S-6 with 80 H. P. LeRhone Engine. (D52.1/Thomas

110. Report of Control Cable Guide Running Test. (D52.39/78.)

#111. Comparative Test of Auxiliary Starting Devices for the Liberty Engine. (D52.415/16.)

112. Ground Test of Cannon Turret Mount. (D72.21/5.)

- 113. Test of Second Shipment Braender Experimental Leakproof Tanks. (D52.44/62.)
- 114. Test of Five Thick-Walled Leakproof Tanks Supplied by Miller Rubber Company. (D52.44/61.)
- 115. Methods in Observation Practiced with Fifth Corps First American Army on the Fronts. (C71.2/31.)
- #116. Standard Test of Hercules Spark Plugs. (D52.413/Spark Plug/43.)
- 117. Preliminary Choice of a Wing Section. (D52.33/159.)
- #118. Lubricating Oils—Specifications and Method for Testing. (D11.2/14.)
- 119. Catalogue of Motion-Picture Films and Lantern Slides. (D13.511/5.)

120. Observation, Selection, and Assignment. (D11.2/14.)

- 121. Report of Tests on Shock Absorber Cord Submitted by Various Flying Fields and General Supply
- 122. Standard Fifty-Hour Endurance Test of Three-Cylinder Lawrance Aviation Engine. (D52.41/Law-
- #123. Investigation of Physical and Chemical Properties of Aluminum and Aluminum Alloy Sheet-Part 1.

#124. Test of Revisions in Cooling Systems for Air-Cooled Cylinders. (D52.414/56.)

#125. Test of the Canton Electrical Vaporizing Device as Applied to a Zenith Carburetor. (D52.411/Zenith/19.)

126. Starting Torque on Liberty, Hispano-Suiza, and other Aviation Engines. (D52.415/17.)

- #127. Standard Engine Report of Hall-Scott Engine, Type L-6, Rated at 200 H. P. at 1,700 revolutions per minute. (D52.41/Hall-Scott/20.)
- #128. Report on X-B-A Cooling System Tests with 1,875 R. P. M. Propeller and 140 Square-Foot Radiator. (D52/414/57.)

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- #130. Standard 50-Hour Endurance Test of Packard Aviation Engine Model 1 A-1116. (D52.41/Packard/4.)
- #131. Torque Stand and Flight Test of Compression Relief Device on the 300-horsepower Hispano-Suiza Aviation Engine. (D52.41/Hispano-Suiza/86.)
- #132. Performance Test of Roland D-VI-B with 200-horsepower Benz Engine. (D52.1/Roland/5.)
- #133. Report on Test of Thomas Morse MB-3 Cooling System. (D52.1/Thomas Morse/28.)

134. Flight Test of Packard Fuelizer on Liberty "12." (D52.41/Liberty/196.)

- #135. Standard Fifty-Hour Endurance Test of Packard Model 1 A-744 8-Cylinder Aviation Engine. (D52.41/ Packard/5.)
- 136. Test of Thick-Walled Leak-Proof Tanks Supplied by Goodyear Tire & Rubber Co. (D52.44/63.)

137. Destructive Whirling Test of Aero Marine Propeller. (D52.43/270.)

- #138. Power Plant Laboratory Calibration of Six Cylinder 185-horsepower B. M. W. German Aviation Engine Prior to Test in the Altitude Chamber of the Bureau of Standards. (D52.41/B. M. W./5.)
- 139. Performance Test of Martin Torpedo Airplane Type M-T with Two 400-horsepower Liberty "12" Engines. (D52.1/Martin/16.)
- 140. Tactical Manual of Aerial Bombardment. (C53/234/40.)
- 141. Aerial Day Bombardment, Pilots and Observers. (C53/99.)
- 142. Aerial Observation for Target Practice at Fort Monroe, Va., During the Season Ending August 26, 1920.
- 143. Report on Performance and Design of Five Representative Geared Aviation Engines. (D52.45/63.)
- #144. Report on Cooling System Test of Ordnance Model D, with 300-horsepower Hispano-Suiza Engine and Nose Radiator of 168 Square Feet. (D52.1/Orenco/7.)
- 145. Investigation of Steel Propeller X-14849. (D52.43/273.)
- 146. Report of Ground Test of 2.95-Inch Airplane Cannon in Martin Bomber. (D72.2/46.)

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- 147. The Shift of the Angle of No-Lift on Propeller Aerofoils. (D52.43/11.)
- 148. Visualization of Air Flow. (F78/41.)
- #149. Fifty-Hour Endurance Run of Hall-Scott Model L-6 Aviation Engine. (D52.41/Hall-Scott/21.)
- #150. Design and Stress Analysis of Wings for PW-2 Night Pursuit Type. (D52.33/33.)
- #151. Report on the Delco Automatic Generator Cut-Out. (D52.413/34.)
- 152. Design of Standard Lugs. (D52.39/79.)
- #153. Performance Estimate of Spad 16-A with 236-horsepower Lorraine-Deitrich Engine. (D52.1/Spad/69.)
- 154. Report on Special Airplane Wheel and Tire. (D52.56/16.)
- 154. Supp. Supplement to Information Circular Vol. II, No. 154—Report on Special Airplane Wheel and Tire. (D52.56/16 Supp.)
- 155. Performance Test of DH-4 with 300-horsepower Hispano-Suiza Engine Showing Performance with Propeller X-19925. (D52.1/DH4/107.)
- #156. Report on Cooling System Flight Test of DH-4-B, with Hispano-Suiza 300-horsepower Engine and Nose Radiator of 170 square feet. (D52.1/DH-4/108.)
- 157. Standard Engine Report on the British 450-horsepower Napier-Lion Engine. (D52.41/Napier/12.)
- 158. Test of Stromberg Inverted Carburetor, Model NA-L5, on the 12-Cylinder Liberty Aviation Engine. (D52.41/Liberty/200.)
- #159. Test of Hispano-Suiza, Model K (Cannon Model), 300-horsepower 8-Cylinder Engine, Rated at 300 horsepower at 1,800 revolutions per minute. (D52.41/Hispano-Suiza/87.)
- (File 629.13/un3as.) *160. Technical Orders No. 18.
- 161. Technical Orders No. 19. (File 629.13/un3as.)
- 162. Technical Orders No. 20. (File 629.13/un3as.)
- 163. Technical Orders No. 21. (File 629.13/un3as.)
- 164. Not printed.
- #165. Report on Low-Test Gasoline Specifications. (D11.31/46.)
- 166. Report on Wind-Tunnel Test of Armored Pursuit Airplane PG-1, Type IV. (F78/49.)
- #167. Standard Engine Report on ABC Wasp Radial Aeronautical Engine, Rated at 170 horsepower at 1,800 revolutions per minute. (D52.41/ABC/17.)
- 168. Test of Lucas Electric Engine Starter. (D52.415/18.)
- 169. Efficiency of McCook Wind Field Tunnel. (F78/45.)
- #170. Fifty-Hour Endurance Test of 300-horsepower Hispano-Suiza Aviation Engine at High Speeds. (D52.41/Hispano-Suiza/88.)
- 171. Report of Static Test of GAX-1 Chassis. (D52.1/G.A.X.1/6.)
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- 173. Performance Test of Junker SL-6 with 185-horsepower B. M. W. Engine. (D52.1/JL6/4.)
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- #175. Instructions for Installing 85-A Mixture Control in Zenith US-52 Carburetors. (D52.411/Zenith/22.)
- #176. Performance Estimate of Vought E-8 with 300-horsepower Hispano-Suiza Engine. (D52.1/Vought VE-8/6.)
- #177. Test of Isotta-Fraschini 6-Cylinder Model V-6 Aviation Engine, Rated at 250 horsepower at 1,650 revolutions per minute. (D52.41/Isotta-Fraschini/11.)
- 178. Report Giving Tables Showing the Freezing Points and Specific Gravity of Alcohol-Water Mixtures. (D11.33/39.)
- 179. Report of Wind-Tunnel Test of the Effect of Rake Angle on Suction in Exhaust Stubs. (F78/44.)
- 180. Final Report of Chief of Air Service, A. E. F., to The Commander in Chief, American Expeditionary Forces. (C21/73.)
- *181. Legal Questions Affecting Federal Control of the Air. (A00.5/58.)
- 182. Report on Test of Sample of Crystal-on and Preliminary Report on Nonfog-giving Treatment of Glass, Using Crystal-on, by the Navy Department. (D11.33/40.)
- #*183. Airplane Performance and Design Charts. (D52.15/136.)
 - (D62.4/22.) 184. The Use of Aerial Photographs in Topographic Mapping.
 - 185. Report on Radio-Equipped Automobile. (D13.411/50.)
- #186. Investigation of the Ballistic Properties of a Urano-Silico-Nickel Steel. (D10.11/61.)
- 187. Report on Performance of Tent Hangar Manufactured by Baker & Lockwood Manufacturing Company. (F34/51.)
- 188. Report on Performance of Tent Hangar Manufactured by the Missouri Tent & Awning Company. (F34/52.)
- #189. Test Report of Kellogg 600-Watt Reverse Current Relay. (D12.1/50.)
- 190. Test of Odier Portable Engine Starter. (D52.415/19.)

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- #191. Standard Engine Report on Rausie Model E-6 Aviation Engine, Rated at 175-horsepower at 1,650 revolutions per minute. (D52.41/Rausie/1.)
- 192. Ten-Hour Endurance Test of Lawrance All-Aluminum Cylinder. (D52.417/3.)
- #193. Performance Test of G. A. X. with Two 400-horsepower Liberty "12" Engines. (D52.1/G.A.X./7.) 194. Electrical Gun Synchronizer Test. (D72.13/19.)
- 195. An Analysis of the Effect of Supercharging. (D52.42/1.)
- 196. Description of the McCook Field Wind Tunnel. (F78/46.)
- *197. Airfoil Data on American and British Airfoils. (D52.33/177.)
- 198. Report of Wind-Tunnel Test on U. S. A. 27 Airfoil. (Supplement to Air Service Information Circular, Vol. I, No. 49.) (D52.33/145 Supplement.)
- 199. Test of a Standard Liberty Cylinder Mounted on a Universal Engine Crank Case. (D52.417/4.)
- 200. Index to Information Circulars 101-200. (Superseded by No. 677.)
- #201. Investigation of Effect of Zinc Plating on the Physical Properties of Streamline Wire. (D52.313/11.)
- 202. Velocity Determination in McCook Field Wind Tunnel. (F78/47.)
- #203. Report on Investigation of Dip Brazing with 80-20 Brass. (D10.16/1.)
- #204. Supplementary Report on Interphone Type SCR-57, Remodeled. (D13.42/7, Supplement.)
- 205. Standard Engine Test of Almen "Barrel" Type Engine. (D52.41 Almen/1.)
- #206. Cooling System Flight Test of Loening M-8. (D52.1/Loening/7.) 207. Report on 36 x 8 Inch Straight-side Tire and Wheel. (D52.54/1.)
- #208. Investigation of Physical and Chemical Properties of Aluminum and Aluminum-Alloy Sheet, Part II.
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- 210. Notes on Airplane Flight Endurance (I). (D52.15/140.)
- 211. Preliminary Report on Investigation of Methods for Preventing the Corrosion of Metal Parts of Air-
- 212. Experimental Reinforced Plywood Truss Ribs. (D52.332/18.)
- 213. Deflection of Beams of Nonuniform Section. (D52.16/17.)
- 214. Operating Tests of Magnetically Operated Starting Switches. (D52.415/20.)
- 215. Report of Ground Test of Baldwin 37-Millimeter Cannon Mounted on DH-4 Fuselage. (D72.2/47.)
- 216. The Use of Commercial Low-Test Automobile Gasoline in Aviation Engines. (D11.31/45.)
- 217. Experiments on the Design of Intake Bell for a Wind Tunnel. (F78/48.)
- #218. Report on the Performance of the 5.5-inch by 6.5-inch Smith Cylinder Unit. (D52.417/5.)
- #219. Performance Estimate of LePere G. H. 11 Equipped with 400 H. P. Liberty "12" Engine. Estimated by means of "Airplane Performance and Design Charts" as Outlined in Air Service Information Circular, Vol. II, No. 183. (D52.1/LePere/24.)
- 220. Results of Static Tests on Standard Airplane Tires and Wheels. (D52.54/2.)
- #221. Performance Estimate of Pomilio FVL-8 Equipped with 8-Cylinder Liberty Engine. Estimated by means of "Airplane Performance and Design Charts" as Outlined in Air Service Information Circular, Vol. II, No. 183. (D52.1/Pomilio/14.)
- 222. A Metallurgical Report on Materials used in Foreign Aeronautical Engines. (A50/7.)
- #223. Induction System Pressures in Liberty Twelve and 300 H. P. Hispano-Suiza Aeronautical Engines.
- 224. Report of Wind-Tunnel Test of USA 27A, B, and C Airfoils. (D52.33/180.)
- 225. PW-1. U. S. A. 27 Wings. (Appendix to Air Service Information Circular, Vol. II, No. 150, entitled "Design and Stress Analysis of Wings for PW-2. Night Pursuit Type.") (D52.33/33, Appendix.)
- 226. Report of Ground Test of Coventry 37-MM. Mark III Airplane Cannon. (D72.2/48.)
- #227. Operating Liberty "12" and Wright-Hispano 300-H. P. Engines on Automobile Gasoline. (D52.41/114.)
- 228. Report of Static Test of Wing Structure of U. S. GAX-1 (Type VI). (D52.1/G. A. X./9.)
- *229. A Treatise for Radio Mechanics. (C53.236/31.)
- 230. Investigation of Junker Biplane Wings. (D52.1/Junker/20.)
- *231. Report of the Medical Research Laboratory and School For Flight Surgeons for the Calendar Year 1920.
- 232. Test of Airplane Engine Heater. (D52.419/66.)
- #233. Report of Cooling System Flight Test of the Fokker D-VII with Mercedes Engine. (D52.1/Fokker/48.)
- 234. Investigation of the Ballistic Properties of a Special Case-Hardening High Chrome-Nickel Light Armor
- #235. Investigation of Physical and Chemical Properties of Aluminum and Aluminum-Alloy Sheet, Part III.

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- 236. Canceled.
- 237. Air Medical Service. (B63/14.)
- 238. Report on Semiportable Radio Direction Finder, Type SCR-142. (D13.41/84.)
- 239. The "1920" Model Hart Reversible Propeller Manual and Parts List. (D52.43/355.)
- 240. Investigation of the Effect of Routing Wing Beams on Modulus of Rupture and other Strength Properties. (D52.33/189.)
- 241. Report on Cooling System Tests of DH-4 Airplane equipped with Experimental Auxiliary Radiator in the Propeller Slipstream. (D52.1/DH-4/111.)
- #242. Investigation of Cork and Air Spacing of Light Armor Plate. (D72.5/7.)
- 243. Calibrtaion of Carburetor Jet Flow. (D52.411/27.) #244. Report of Wind Tunnel Test on U. S. A. Airfoils 30, 31, 32, 33, and 34. (D52.338/14.)
- #245. Report on Cooling System Flight Tests of the VCP-1 with Annular Radiator. (D52.1/Verville/13.)
- 246. Metal Tipping of Aircraft Propellers. (D52.43/358.)
- 247. Investigation of Thin-Walled Seamless Steel Tubing, Round and Streamline. (D52.333/65.)
- #248. Report of Wind Tunnel Test on R. A. F. 19, Springer No. 3, and Gottingen No. 244. (D52.33/188.)
- #249. Report on Standard Test of the A. C. Spark Plugs. (D52.413/Spark Plug/51.)
- . 250. Preliminary Report on Comparison of Protective Airplane Wing Coverings. (D11.23/83.)
- #251. Standard Report on Walker Radial Engine. (D52.41/Walker/1.)
- #252. Standard Engine Report on ABC "Dragonfly" Aviation Engine Rated at 320 H. P. at 1,650 R. P. M. (D52.41/ABC/18.)
- 253. Tests of Carbic Night Landing Lights. (D13.46/37.)
- 254. Report of Static Test on the J. V. Martin Shock-Absorbing Wheels with the Curtiss JN-4 Chassis. (D52.56/3.)
- #255. Investigation of Fatigue and Vibration of Metals. Part I. Tests on the Upton-Lewis and Farmer Machines. (D10.1/70.)
- 256. Instructions for the Storage of Airplanes, Engines, Their Parts and Accessories. (D00.22/8.)
- 257. Instructions to Pilots for the use of Mixture Controls. (D52.416/7.)
- 258. Vacuum Nonfrosting Goggles. (D26.1/22.)
- 259. Investigation of Crushing Strength of Spruce at Varying Angles of Grain. (D11.1/164.)
- 260. The Economic Limit in Aspect Ratio of Single-Bay Pursuit Biplanes. (D52.1/341.)
- 261. Performance of the Twelve-Cylinder Liberty Engine with a Compression Ratio of 6.5 to 1. (D52.41/ Liberty/215.)
- 262. Tip-Vortices Shown by the McCook Field Wind Tunnel. (F78/52.)
- 263. Investigation of the Effect of the Ratio of Diameter to Gage Thickness upon the Torsional Strength of Steel Tubing. (D10.11/63.)
- #264. Report on Cooling System Test of Martin Bomber MB-2 "P-162." (D52.1/Martin/18.)
- #265. Report on Tests of A. B. C. "Dragonfly" Cylinder. (D52.41/A. B. C./19.)
- 266. Report of Static Test of Curtiss Night Pursuit Airplane, Type II. (D52.15/149.)
- #267. Report of Wind Tunnel Test on Gottingen No. 227 Aerofoil. (D52.338/16.)
- 268. Supplementary Report on Experimental Reinforced Plywood Truss Ribs. (D52.332/18, Supplement.
- #269. Test of Packard 12-Cylinder Model 1A-2025 Aviation Engine Rated at 550 H. P. at 1,800 R. P. M. (D52.41/Packard/8.)
- #270. Report of Static Test on Engineering Division Messenger Airplane. (D52.1/344.)
- #271. Report on Cooling System Flight Test of DH-4-C as Furnished by the Packard Motor Car Company. (D52.1/DH4/116.)
- #272. Fifty-hour Endurance Test of Curtiss Model C-6 Aviation Engine. (D52.41/Curtiss/22.)
- #273. Report on Standard Test of Mosler Spark Plugs, Model M-1. (D52.413/Spark Plug/52.)
- #273. Supplement. Changes in Information Circular, Volume III, No. 273. Report on Standard Test of Mosler Spark Plugs, Model M-1. (D52.413/Spark Plug/52.)
- 274. Report on the Corrosion Prevention of Metallic Aircraft Parts. (D11.2/18.)
- 275. Investigation of Methods of Making Manganese Bronze Castings to meet Air Service Specification No. 11021. (D10.16/2.)
- 276. Tests on Combined Loading of Wooden Struts. (D52.333/66.)
- 277. Laboratory Test on Hartmann & Braun Electric Thermometer. (D13.3/Thermometer/8.)
- 278. Report on Special Airplane Wheel and Tire (28 x 4 Straight-side Tire, One-Piece Rim.) (D52.56/18.)
- #279. Fifty-hour Endurance Test of Model "H" 300 H. P. Hispano-Suiza Engine with Cracked Crankcase. (D52.41/Hispano-Suiza/99.)
- 280. Performance Test of Messenger Airplane equipped with 3-Cylinder 60 H. P. Lawrance Engine. (52.1/354.)

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- No. Title of circular and Air Corps Library File No.
- #281. The Sylphon Fuel Pump for Liberty "12" and Wright Model "H" Engines. (D52.46/28.)
- #282. Fifty-Hour Endurance Flight Test of Delco Automatic Generator Cut-Out. (D52.413/35.)
- 283. Report of Test of Cannon Ring Mount Type "A". (D72.21/8.)
- 284. Performance of the Packard Model 1A-1116 Aviation Engine with 6½:1 Compression Ratio. (D52.41/Packard/9.)
- 285. Performance Test of Morane Saulnier Type A. R. Airplane with Two sets of Wings Equipped with 80-H. P. LeRhone Engine. (D52.1/Morane Saulnier/17.)
- 286. Performance Test of Spad 13 Equipped with 220-H. P. Wright Engine. (D52.1/Spad/76.)
- Performance Test of DH-4 with 400-H. P. Liberty "12" Engine, Equipped as Two-Seater Corps Observation Airplane. (D52.1/DH4/119.)
- #288. Official Performance Test of Fokker Monoplane D-VIII Equipped with 110-H. P. Oberursel Engine. (D52.1/Fokker/55.)
- 289. Comparative Effect on Engine Operation in Flight of Outside and Inside Air Intakes. (D52.45/74.)
- 290. Official Performance Test of Martin Bomber N. B. S.-1 Equipped with Two 400-H. P. Liberty "12" Engines. (D52.1/Martin/21.)
- #291. Instructions to Designers of Aircraft Carburetors. (D52.411/30.)
- 292. Report on the Control of Carburetor Metering Characteristics by the Supplementary Admission of Air. (D52.411/29.)
- 293. Comparative Flight Performance of Liberty Engines Equipped with 5.42 and 6.5 Compression Ratios. (D52.41/Liberty/219.)
- #294. Cooling System Test of the Curtiss JN-6 with Packard 1A-744 Engine Equipped with Side Radiators. (D52.1/Curtiss/JN-6/5.)
- #295. Report on Cause of Cracking of Alloy Steels During Dip Brazing. (D10.11/69.)
- #296. Performance Estimate of Huff-Daland Biplace Training Plane, Equipped with 170-H. P. A. B. C., Wasp "7" Engine. Estimated by means of "Airplane Performances and Design Charts" as Outlined in Air Service Information Circular, Vol. II, No. 183. (D52.1/Huff-Daland/4.)
- #297. Investigation of Dip Brazing with High Melting Point Brass. (D10.16/3.)
- 298. Investigation of Some Solders for Aluminum. Part I. (D10.13/68.)
- #299. Cooling System Test of LePere P-70 Equipped with Side Radiators. (D52.1/LePere/30.)
- 300. Index to Information Circulars 201-300. (Superseded by No. 677.)
- 301. Liberty Storage Battery Endurance Test (Power Plant Section Report). (File D52.41/Liberty/225.)
- #302. Fifty-hour Endurance Flight Test of Auxiliary Starting Device (Buzzer Starter) for the Liberty Engine (Power Plant Section Report). (File D52.415/23.)
- 303. Discussion of Airplane Tires and Wheels (Material Section Report No. 150). (File D52.56/17.)
- 303. Addendum to Information Circular, Vol. IV, No. 303, Discussion of Airplane Tires and Wheels (Material Section Report). (File D52.56/17/Addendum.)
- 304. Nomographic Column Charts (Airplane Section, S. & A. Branch). (File D52.16/31.)
- 305. Report on Modified Weed Shackle. (D72.33/85.)
- #306. Performance Test of Production Orenco "D," Built by the Curtiss Aeroplane & Motor Corporation, Equipped with Wright 300-H. P. Engine (Performance Test Report No. 68). (File D52.1/Orenco/9.)
- 307. Comparative Study of Type I Airplanes with Various Power Plants (Airplane Section Report). (File D52.45/77.)
- 308. Investigation of the Effect of Doped Fuels on Fuel System (Material Section Report No. 152). (File D52.416/9.)
- #309. Test to Improve Fuel-Consumption Characteristics of the Stromberg Type NA-D6 Carburetor on the 300-H. P. Hispano-Suiza Engine (Power Plant Section Report). (File D52.41/Hispano-Suiza/102.)
- #310. Performance Test of Fokker D-VII Equipped with Packard 1237 Engine (Performance Test Report No. 69). (File D52.1/Fokker/58.)
- 311. The Determination of a Carburetor Setting for the Liberty Engine for Dirigible Use (Power Plant Section Report). (File D52.41/Liberty/222.)
- 312. Design of Large Trussed Ribs (Airplane Section, S. & A. Branch). (File D52.332/21.)
- 313. Reinforced Ply-Wood Web Spars (Airplane Section, S. & A. Branch). (File D52.331/37.)
- #314. Instructions for Stromberg NA-L5 Double Venturi Inverted Type Airplane Carburetor (Power Plant Section). (File D52.411/Stromberg/5.)
- 315. Determination of the Best Wing Loading for Single-Seater Pursuit Airplanes (Airplane Section, S. & A. Branch). (File D52.15/156.)
- 316. Test of Weston Model 44 Electrical Tachometer. (D13.3 Tachometer/12.)
- 317. Method for Estimating Power and Fuel Consumption of Normal Compression Aviation Engines in Flight at Various Altitudes (Power Plant Section Report). (File D52.45/82.)

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317. Changes No. 3.—Method for Estimating Power and Fuel Consumption of Normal Compression Aviation Engines in Flight at Various Altitudes. (File D52.45/82.)

318. Effect on Variation in Load Factor on Structural Weight of Wings (Airplane Section, S. & A. Branch).

(File D52.33/200.)

#319. Report on the Elimination of Detonation with "Aviation" and "Motor" Gasoline by the Addition of Xylidine, Ortho-Toluidine, Benzol, and General Motors Anti-Knock No. 1 (Power Plant Section Report). (File D11.3/26.)

320. Determination of Water in Gasoline as Received, Exposed to Atmosphere, to Humid Atmosphere, and

Saturated with Water (Material Section Report No. 156). (File D11.31/49.)

#321. Report of Wind Tunnel Test of Corps Observation CO-1 Model (Airplane Section, S. & A. Branch). (File D52.1/373.)

#322. Report of Static Test of Ski for an SE-5 Airplane (Airplane Section, S. & A. Branch). (File D52.1/S. E.

#323. Report on Airplane Radio Receiving Set, Type SCR-59, Remodeled (Equipment Section Test Report). (File D13.411/57.)

#324. Fifty-hour Endurance Test of Rausie E-6 Aviation Engine (Power Plant Section Report). (File D52.41/

#325. Standard Engine Report of Aeromarine Model U-8-D Aviation Engine Rated at 180 Horsepower at 1,750 Revolutions Per Minute (Power Plant Section Report). (File D52.41/Aeromarine/3.)

#326. Fifty-hour Endurance Run of Model W-1 Engine (First Experimental Model) (Power Plant Section Report). (File D52.41/W-1/2.)

327. Comparative Performance Test of X. B. I.-A Equipped with High Compression Wright Model "H" and Packard 1237 Engines (Performance Test Report No. 67). (File D52.1/371.)

328. Report of Wind Tunnel Tests on Aerofoils; Dayton-Wright Nos. TT-1 and TT-2, Dayton-Wright Nos. 5 and 6, and Gottingen No. 387 (Airplane Section, S. & A. Branch). (File D52.338/31.)

329. Standard Engine Report on Curtiss Model C-6 Aviation Engine Rated at 160 Horsepower at 1,750 Revolutions Per Minute (Power Plant Section Report). (File D52.41/Curtiss/23.)

330. Standard Engine Report on Curtiss 12-Cylinder Model C-12, Geared Aviation Engine, Rated at 400 H. P. at 2,250 Revolutions Per Minute (Engine Speed) (Power Plant Section Report). (File D52.41/ Curtiss/24.)

331. Not Printed.

332. Study of Stress Analysis of the JL-6 (Airplane Section, S. & A. Branch). (File D52.1/J. L. 6/7.)

333. Report of Test of 300-H. P. Hispano-Suiza Model H Engine Fitted with Pistons Which Give a 6.5:1 Compression Ratio. (D52.41 Hispano-Suiza/103.)

334. Report on Wind Tunnel Test of U. S. A.-27-C Modified Airfoil (Airplane Section, S. & A. Branch). (File D52.338/33.)

#335. Investigation of Forged and Cast Brass (Material Section Report No. 158). (File D10.16/5.)

336. Effect of Fuel Head at Carburetor, on Brake Horsepower and Brake Specific Fuel Consumption (Power Plant Section Report). (File D11.31/50.)

337. The Economical use of Duralumin as a Substitute for Steel in Compression (Airplane Section, S. & A. Branch). (File D10.13/69.)

#338. Report of Static Test of XB-1-A Fuselage (Airplane Section, S. & A. Branch). (File D52.1/U. S. B. 1.A/5.)

339. Temperature Effect on Capillaries of Liquid and Vapor Pressure Thermometers (Equipment Section Test Report). (File D13.3/Thermometers/10.)

340. Statistics Compiled from Reports on Crashes in the U.S. Army Air Service During the Calendar Years 1918-1921, Inclusive, and Results of Physical Examinations for Flying During the Calendar Years 1920 and 1921. (File B70/102.)

341. Description of McCook Field 5-Foot Wind Tunnel (Airplane Section, S. & A. Branch). (File F78/59.)

342. Report of Test of Davis 3-Inch Nonrecoil Cannon Mounted in Martin Bomber (Armament Section Report). (File D72.1/Davis/2.)

343. Not Printed.

#344. Report on the Performance of the Wright Model H-2 "Superfighter" Engine (Power Plant Section Report). (File D52.41/Wright/2.)

#345. Report on Blower Used in Tests of Air-Cooled Cylinders (Power Plant Section Report). (File D52.419/103.)

346. Fuel Consumption Test of DH-4B with Liberty "12" Engine (Flight Test Report No. 77). (File D52.1/DH-4/125.)

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- 347. Technical Orders No. 22. (File 629.13/un3as.)
- 348. Technical Orders No. 23. (File 629.13/un3as.)
- 349. Technical Orders No. 24. (File 629.13/un3as.)
- 350. Technical Orders No. 25. (File 629.13/un3as.)
- 351. Technical Orders No. 26. (File 629.13/un3as.)
- 352. Performance Test of Navy Vought Type XV Equipped with Wright Model E-2 Engine (Performance Test Report No. 73). (File D52.1/Vought/3.)
- 353. Reserve Bending Strength of Struts (Airplane Section, S. & A. Branch). (File D52.333/67.)
- 354. Variation in Performance of a Hispano-Suiza (Model E) Engine with Degree of Throttle Opening (Power Plant Section Report). (File D52.41/Hispano-Suiza/106.)
- 355. Report of Wind-Tunnel Test of DH-4B Model (Airplane Section, S. & A. Branch). (File D52.1/DH4/126.)
- *356. Variation in Volumetric Efficiency of an Engine with Valve Lift (Power Plant Section Report). (File D52.41/124.)
- 357. Report on Test of Bijur Ignition End Starter for Airplane Engines (Equipment Section Report). File D52.415/29.)
- #358. Static Test of the Loening PA-1 Single-Seater Pursuit Airplane (Airplane Section, S. & A. Branch). (File D52.1/Loening/12.)
- #358. Addendum to Information Circular, Vol. IV, No. 358, Static Test of the Loening PA-1 Single-Seater Pursuit Airplane (Airplane Section, S. & A. Branch). (File D52.1/Loening/12/Addendum.)
- *359. Air Medical Service. (File B63/16.)
- #360. Report of Static Test of the Junker L-6 Monoplane (Airplane Section, S. & A. Branch). (File D52.1/J. L. 6/8.)
- 361. Carburetion, Heat Rejection, and Weight Data of U. S. Model W-1 Engine (Power Plant Section). (File D52.41/W-1/3.)
- #362. Static Test of Thomas-Morse MB-6 Airplane (Airplane Section, S. & A. Branch). (File D52.1/Thomas-Morse/31.)
- 363. Heat Treating Bath Composed of Sodium Chloride, Sodium Carbonate, and Sodium Cyanide (Material Section Report No. 166). (File D50.1/7.)
- 364. Adaptability of the Hyde Welding Process to Steel Engine Cylinder Construction (Material Section Report No. 165). (File D00.57/2.)
- #365. Static Test of the Aeromarine PG-1 Airplane (Airplane Section, S. & A. Branch). (File D52.1/Aeromarine PG-1.)
- 366. Emergency Landings From Low Altitudes—Minimum Altitude Required to Turn Back into Field in Case of Engine Failure After Take-Off (Flying Section Report No. 83). (File C71.6/152.)
- 367. Wind Tunnel Test of the Junker L-6 Monoplane (Airplane Section, S. & A. Branch). (File D52.1/Junker 6/10.)
- 368. Tests of Back-Suction and Air-Bleed Type Mixture Controls in Flight (Power Plant Section Report). (File D52.411/32.)
- #369. The Bellows (Sylphon) Fuel Pump for Liberty "12" and Wright Model "H" Engines (Supersedes Report of April 28, 1921, Entitled "The Sylphon Fuel Pump," and Published in Information Circular No. 281). (Power Plant Section Report.) (File D52.46/28.)
- #370. Test of a Zenith Carburetor, Model U. S. 52 Fitted with "Plain Tube" and Britton Type Discharge Nozzles (Power Plant Section Report). (File D52.411/Zenith/24.)
- 371. The Physical Properties of Manganese-Bronze (Material Section Report No. 175). (File D10.16/6).
- 372. Flight Test of Anti-Knock Injector (Power Plant Section Report). (File D52.419/106.)
- 373. Test of Curtiss Eight-Cylinder Model OX-5 Engine Rated at 90 Horsepower at 1,400 Revolutions Per Minute (Power Plant Section Report). (File D52.41/Curtiss/27.)
- *374. Interior Corrosion of Steel Struts and its Prevention (Material Section Report No. 172). (File D11.2/27.)
- 375. Curves for Estimating the Fuel Consumption of An Aviation Engine on the Basis of Piston Displacement and Revolutions per Minute (Power Plant Section Report). (File D11.3/27.)
- 376. Methods of Making Aluminum Bronze Castings (Material Section Report No. 174). (File D10.16/7.)
- 377. Technical Orders No. 27. (File 629.13/un3as.)
- 378. Technical Bulletin (Formerly Technical Orders) No. 28. (File 629.13/un3as.)
- 379. Technical Bulletin (Formerly Technical Orders) No. 29. (File 629.13/un3as.)
- 380. Technical Bulletin (Formerly Technical Orders) No. 30. (File 629.13/un3as.)
- 381. Technical Bulletin No. 31. (File 629.13/un3as.)
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- No. Title of circular and Air Corps Library File No.
- 383. The Effect of Doped Fuels on the Fuel System, Part II (Material Section Report No. 173). (File D52.416/9/.Pt. II.)
- *384. Effect of Climate on Standard Airplane-Wing Coverings (Material Section Report No. 177). (File D24. 31/46.)
- #385. Investigation of Copper-Silicon-Aluminum Alloys with and Without Manganese (Material Section Report No. 178). (File D10.1/80.)
- 386. Performance Test of U. S. Mail DH-M2 (Performance Test Report No. 89). (File D52.1/D. H. M. 2/2.)
- *387. Airplane Wing Fittings (Airplane Section, S. & A. Branch). (File D52.33/208.)
- #388. Static Test of the Dayton-Wright TA-3 Airplane (Airplane Section, S. & A. Branch). (File D52.1/Dayton-Wright/2.)
- #389. Pyrotechnic Projector and Ammunition Submitted By the Ordnance Department for Test (Armament Section Report). (File D70/64.)
- 390. Sediment Deposit in Carburetors (Material Section Report No. 183). (File D52.411/34.)
- 391. Report of Inspection Trip to France, Italy, Germany, Holland, and England, made during the Winter of 1921-1922, Technical Supplement. (File A10/166.)
- 392. Modified Mark I Airplane Flare (Armament Section Report). (File D13.47/21.)
- #393. Physical and Metallographic Properties of Copper-Zinc-Aluminum Alloys Containing Small Amounts of Magnesium (Material Section Report). (File D10.1/82.)
- 394. The Distribution of Load Among the Spars in Multi-Spar Construction of Airplane Wings (Airplane Section Report). (File D52.331/40.)
- *395. Comparison of Column Formulas (Airplane Section Report). (File A10.23/177.)
- #396. Test of Machine-Gun Snychronizer Type C-8 (Armament Section Report). (File D72.13/49.)
- 397. Bamberg Speed-Measuring Station (Equipment Section Report). (File D13.3/89.)
- 398. Fuel Consumption During Climb—DH-4B with Liberty 12-A Engine and Form "D" Supercharger (Power Plant Section Report). (File D52.1/D.H.4/129.)
- 399. Test of Supercharger Air Coolers (Power Plant Section Report). (File D52.414/72.)
- 400. Index to Information Circulars 301-400. (Superseded by No. 677.)
- Investigation of the Effects on Cylinder Performance of Variation of Position and Number of Spark Plugs. (D52.417/13.)
- *402. Aircraft Development Since the Armistice. (A10/169.)
- 403. Air Medical Service. (B63/7.)
- 404. Airways and Landing Facilities. (F10.3/53.)
- 405. Description of Carburetor Test Chamber and Method of Making Computations. (D52.411/35.)
- #406. Static Test of the Fokker PW-5, Type I, Airplane. (D52.1/Fokker/68.)
- #407. Performance Test of Huff-Daland TA-2, Equipped with Curtiss OX-5 Engine. (D52.1/Huff-Daland/8.)
- 408. Investigation of the Heat Treatment of Sand-Cast Duralumin. (D10.13/79.)
- 409. Impact Test of a JN-4 Tail Skid and Landing Chassis. (D52.1/Curtiss JN-4/35.)
- #410. Cooling System Flight Test of TW-1 Airplane. (D52.1/TW1/2.)
- #411. Performance Test of Huff-Daland TA-2, Equipped with Lawrance "R" Engine. (D52.1/Huff-Daland/9.)
- #412. Performance Test of G. Elias TA-1, Type XIV, Equipped with Lawrance R-9 Engine. (D52.1/G. Elias/2.)
- #413. Performance Test of Fokker D-IX, PW-6, Equipped with Wright H-2 Engine. (D52.1/Fokker/67.)
- #414. Performance Test of Fokker TW-4, Equipped with Curtiss OX-5 Engine. (D52.1/Fokker/66.)
- 415. Performance Test of Fokker CO-4, Equipped with Liberty "12" Engine. (D52.1/Fokker/65.)
- #416. Performance Test of Loening PW-2A, Equipped with Wright "H" 300-horsepower Engine. (D52.1/Loening/14.)
- #417. Static Test of the Gallaudet PW-4, Type I, Airplane. (D52.1/Gallaudet/3.)
- *418. A Study of Controllability, Angular Velocity, and Dynamic Stability of an Airplane about the Axis of Pitch. (A10.23/135.)
- 419. The Pressure Distribution over the Stabilizer of the Vought VE-7 Airplane. (D52.1/Vought VE-7/23.)
- 420. An Investigation of the Structural Strength of the T-2 Transport, A. S. No. 64233. (D52.1/T2/3.)
- 421. Standard Method of Engine Calculations. (D00.11/29.)
- 422. Test to Determine Minimum Fuel Head to Operate Liberty "12" Engine on Propeller Load. (D52.41/ Liberty/244.)
- 423. Comparative Mathematical Analysis of the Stresses Occurring in the Cam-Shaft Drive Gears of the Liberty "12" and the Packard "2025" Engines. (D52.41/128.)
- #424. Static Test of Martin Bomber Elevator Controls. (D52.1/Martin/34.)
- 425. Technical Bulletin No. 32. (File 629.13/un3as.)
- 426. Technical Bulletin No. 33. (File 629.13/un3as.)

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   427. Technical Bulletin No. 34.
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  429. Technical Bulletin No. 36.
                                  (File 629.13/un3as.)
  430. Technical Bulletin No. 37.
                                  (File 629.13/un3as.)
  431. Technical Bulletin No. 38.
                                  (File 629.13/un3as.)
  432. Technical Bulletin No. 39.
                                  (File 629.13/un3as.)
  433. Performance Test of Loening PW-2-B, Type I, Equipped with Packard 1237 High-Compression Engine.
         (D52.1/Loening/17.)
  434. Performance Test on Loening PW-2, Type I, Equipped with Wright 300 H. P. Engine. (D52.1/Loening/
         18.)
  435. Performance Test of N. B. S.-1 (Curtiss), Equipped with Two 400 Liberty "12" Engines. (D52.1/
          Curtiss NBS1/1.)
  436. Design Characteristics for Most Suitable Pursuit Airplanes. (D52.1/434.)
 #437. Static Test of the Cox-Klemin TW-2 Training Airplane, A. S. No. 68540.
                                                                             (D52.1/Cox-Klemin/1.)
 *438. The Effect of Eccentricities on Stresses in Airplane Spars. (D52.331/41.)
  439. The De Bothezat Barograph, Type "A." (D13.3/Barograph/3.)
  440. Design of Internally Braced Biplane Wings. (D52.33/217.)
 #441. Performance Test of Dayton Wright TA-3, Type XIV, Equipped with 80 LeRhone, Model "C." (D52.1/
         Dayton-Wright/3.)
  442. Development of Stromberg, Inverted Type Model NA-L5 Carburetors. (D52.411/Stromberg/7.)
  443. The Strength of Wing Ribs. (D52.332/23.)
  444. Report on Gliders. (D52.19/29.)
  445. Physical Properties of Chrome-Molybdenum Steel Tubing. (D10.1/93.)
 *446. Nomographic Column Charts. (D52.16/31.)
  447. Stress Analysis of the Model W-1 Engine. (D52.41/W-1/4.)
 #448. Investigation of the Z-D Process for Treatment of Light Alloys to Inhibit Corrosion, to Minimize Poros-
        ity, and to Effect Desired Physical Properties. (D10.1/105.)
 #449. Metallography of Sand Cast Aluminum Alloys. (D10.13/88.)
  450. Alcohol-Gasoline Mixtures. (D11.31/58.)
 451. Comparison Tests of Storage Preparations for Aviation Engine Storage of Less than Six Months.
         (D11.2/41.)
#452. Performance Test on Engineering Division CO-5 Airplane Equipped with Liberty "12" Engine.
        (D52.1/CO-5/1.)
 453. Wind Tunnel Test of CO-2A Model Airplane. (D52.1/CO2/2.)
#454. Aileron Effectiveness. (D52.338/81.)
#455. Wind Tunnel Test of the Original TA-4 with the Following Airfoils: USA-27C Large; USA-27C Small;
        Gottingen 387; Gottingen 255. (D52.1/TA-4/2.)
#455. Appendix.—Appendix to Air Service Information Circular Vol. V, No. 455. Wind Tunnel Test of the
        Original TA-4 with the Following Airfoils: USA-27C Large; USA-27C Small; Gottingen 387;
        Gottingen 255. (D52.1/TA4/2/Appendix.)
 456. Performance Test on Fokker CO-4, Equipped with Liberty "12" Engine and Side Radiators. (D52.1/
        Fokker/76.)
 457. Performance Test on Fokker CO-4, Equipped with Liberty "12" Engine and Nose Radiators. (D52.1/
        Fokker/75.)
 458. The Bellows (Sylphon) Fuel Pump for Liberty "12" and Wright "H" Engines. (D52.46/28.)
#459. Index Air Service Orders and Circulars January 1, 1919, to December 31, 1923. (C13/109.) Superseded
        by Circular 5-1 OCAS, May 16, 1924.
 460. Performance Test of Boeing Pursuit, Type I, Equipped with Curtiss D-12 Engine. (D52.1/Boeing/3.)
 461. Economy Test of the DH-4. (D52.1/DH4/135.)
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- *478. Appendix.—Appendix to Air Service Information Circular Vol. V, No. 478, Wind Tunnel Test of 36 by 6 Inch Airfoils. (D52.338/93/Appendix.)
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705	Unknown
70 6	The Compressive Strength of Stainless Steel Sheet-Stringer Combinations, Part III - Cylindrical Specimens
7 07	Vibration Isolating Radial Engine Mounts
708	An Investigation of Compressive Strength Properties of Stainless Steel Sheet-Stringer Combinations
7 09	Horsepower Correction Factors for Pressure, Temperature, and Humidity at Sea Level and Altitude
710	Pressure Cabin Investigations Phase I [1937]
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713	Progress Report on Methods of Analysis Applicable to Monocoque Aircraft Structures
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715	The Torsional Strength of Aluminum Alloy Tubing

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1. Tests of Balloon Fabrics. (A10.1/8.)

- 2. Extract from Report of Bureau of Standards regarding the Recommendation for Filling Balloons. (D11.322/21.)
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4. Notes Concerning Hydrogen Cylinders. (A10.1/8/BB-25.)

5. Net Tensions. (A10.1/8/BB-46.)

6. Report on the Electrostatic Properties of Balloon Fabrics. (A10.1/8/BB-52.)

7. Stevens Parachute Pack. (A10.1/8/BB-55.)

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28. Report on the Causes and Prevention of Fires in Balloons. (A10.1/8/BB-129.)

29. Fireproofing Parachutes. (A10.1/8/BB-132:)

30. Topography and Perspective for Balloon Officers. (A10.1/8/BB-115a.)

31. Theoretical Course in Aerodynamics. (A10.11/7.)

32. A Short Theoretical Course in Airship Engines. (C53.231/8.) Nos. 33 to 37, both inclusive, not printed.

38. Electrification of Observation Balloons. (D52.81/49.)

39. Characteristics of Streamline Forms and Design Data for Airship Hulls. (D52.76/5.)

40. Comparison of the Air Resistance of the Following Airship Models: C-1, C-2, RO, SR-1, and UB-2A. (D52.7/139.)

41. Development of Manila Balloon Rope. (D52.83/31.)

41. Addendum to Information Circular, Volume I, No. 41, Development of Manila Balloon Rope. (D52.83/31/Addendum.)

42. The Lift of Gases in Practical Balloon and Airship Operation. (D11.32/51.)

43. Speed and Ceiling of U. S. Army Airships. (D52.7/163.)

44. Condensation of Water from Engine Exhaust for Airship Ballasting. (Bureau of Standards Report.) (D52.83/38.)

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133. Announcement. (D00.12/75.)

134. Not printed.

- *135. N. C. L. Observation Balloon Winch. (D52.83/14.)
- *136. Observation Balloons Serving Infantry. (C71.2/20.)
- *137. General Notes on Organization and Tactics Indispensable to the Balloon Observer. (A10.12/1.)
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- *156. Translations of German Documents on "Notes of the Balloonist." (Balloon Notes A. E. F. No. 64.)
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